UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

August 25, 2016

Mr. Barnie T. Gyant
Deputy Regional Forester, Pacific Southwest Region
Attention: Forest Plan Revision Team
Pacific Southwest Regional Office
1323 Club Drive
Vallejo, California 94592

Subject: Draft Environmental Impact Statement for Revision of the Inyo, Sequoia, and Sierra National Forests Land Management Plans, California and Nevada. (CEQ# 2016110)

Dear Mr. Gyant:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Revision of the Inyo, Sequoia, and Sierra National Forests Land Management Plans Project, pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA supports the Forest Service's efforts to implement Forest Plan revisions under the 2012 Planning Rule for the Inyo, Sequoia and Sierra National Forests. EPA acknowledges the Forest Service's need to include evolving scientific data and renew its understanding of approaches to land management "in a constantly changing environment" (p. 6) and we support the transition to Forest Plans that include ecosystem sustainability and protection of forest resources from fire. Challenges such as changing climate and limited resources for fuels reduction and fire management present many difficulties inherent to the transition toward sustainable resource management. We strongly encourage the Forest Service to include in the Final Environmental Impact Statement (FEIS) all sustainable elements of the 2012 Planning Rule that "manage toward desired conditions, or outcomes", such as board feet of timber.

We have rated the DEIS and Preferred Alternative B as Environmental Concerns – Insufficient Information (EC-2). Our concerns are based on watershed health, long-term carbon stability, sensitive species habitats, and overall sustainable forestry practices. Based upon our review, Alternative D appears to be the environmentally preferable alternative. We suggest the FEIS include changes to the Preferred Alternative, such as designating some additional wilderness for each forest, balanced with the increased vigorous fuels management and restoration activities of Alternative D.

Watersheds

The DEIS acknowledges that soil instability often follows high intensity forest fires. A lack of effective fuels management practices may lead to poor water quality in streams adjacent to future burn areas. Restoration of areas with high fire risk is necessary to reduce the extent of potential future adverse

impacts to water quality and overall watershed health that may arise following future forest fires. We agree with Page 51 of the document that states there are "more stewardship opportunities for watershed restoration in Alternative D." Similarly, Tables 9-11 in the section titled "Water, Aquatic and Riparian Ecosystem Restoration" indicate that riparian restoration would be potentially 20%-50% greater for Alternative D. EPA is concerned that with current and continued drought conditions already impacting water quality, the cumulative impacts of soil runoff from future forest fires could potentially contribute to a severe decline of aquatic species habitat and overall watershed health.

Recommendations:

We recommend the FEIS include a comparison of the ability of all analyzed alternatives to reduce possible future impacts to watersheds from high intensity fire. Include a consideration of fuels management and fire resilience efforts to more clearly describe the long term benefits that would result from the proposed restoration levels included in each alternative.

We recommend that elements of Alternative D, including stewardship opportunities for watershed restoration, be included in the Preferred Alternative to provide the greatest opportunity for riparian and watershed health and restoration.

Climate Change

Increased heat, drought and insect outbreaks, all linked to climate change, have increased plant stress and mortality. Decades of fire suppression have increased vegetation density and fuel loads. The combined effect of climate change and fire suppression have greatly increased the vulnerability of forests and has resulted in more frequent and larger wildfires which burn with more severity. These changes are forcing wholesale changes to forest types, landscapes and the communities that depend on them. The DEIS considers the ability of forests and soils to sequester carbon by looking at carbon stocks, sequestration and stability. The DEIS also aims to increase the resilience of the forests and reduce the intensity and severity of wildfires which will improve the project areas carbon sequestration ability and improve carbon stability.

The DEIS describes Alternative D as the alternative with the most sustainable forestry attributes because it includes the greatest number of opportunities to manage wildfires intensified by climate change, (p. 37). EPA believes there are opportunities presented in Alternative D that can also be incorporated into the Preferred Alternative (Alternative B), such as the timing and extent of restoration, increasing the amount of thinning prior to prescribed burns, and faster reduction of stand density to avoid impacts intensified by drought. These actions would improve tree resilience, thereby protecting species habitats that are highly affected by high intensity fires. We note that Alternative D also provides more opportunity for coordination with local communities for fire prevention.

The Council on Environmental Quality's August 1, 2016 guidance for Federal agencies' consideration of GHG emissions and climate change impacts in NEPA outlines a reasonable approach to assess climate change impacts. The CEQ guidance states, "In addressing biogenic GHG emissions, resource management agencies should include a comparison of estimated net GHG emissions and carbon stock changes that are projected to occur with and without implementation of proposed land or resource management actions. This analysis should take into account the GHG emissions, carbon sequestration potential, and the changes in carbon stocks that are relevant to decision making in light of the proposed actions and timeframes under consideration," (p. 26).

Recommendation:

We recommend that Forest Service include in the FEIS an updated climate change analysis that includes a comparison of estimated net GHG emissions and carbon stock changes projected from all analyzed alternatives. Include a comparison of the short and long term potential of improving ecological fire resilience for all analyzed alternatives to supplement the information presented for Preferred Alternative, Alternative B. This comparison may help decision-makers understand what additional management actions may contribute to greater ecological fire resilience, i.e. carbon stability. Refer to the CEQ guidance to assist in any updates to the climate change analysis.

Consider incorporating elements of Alternative D into the Preferred Alternative such as the pace and scale of restoration, increasing the amount of thinning prior to prescribed burns, and faster reduction of stand density to avoid drought related stress.

Reforestation or replanting is mentioned, but it's not clear to what extent climate change will be considered in replanting. Appendix A implies consideration of climate: "Seedlings are grown in tree nurseries from selected seed sources to meet the expected demands of the future growth environment" (Appendix A, p. 11).

Recommendation:

We recommend that the FEIS discuss measures to improve forest adaptation to climate change, such as the selection of certain species for replanting. Include a discussion of the effects that climate change may have on the ability of seeds/seedlings to grow. For example, consider the increased vulnerability of specific species under a reasonably anticipated climate change scenario, and any projected shift of forest species to more suitable range elevations. As an example, an EIS for reforestation of a recent high intensity fire on the adjacent Stanislaus National Forest called for "all seedlings be moved up one elevational band (500 feet) to ensure they are better adapted to the warmer and drier climates."

Air Quality

Page 124 of the DEIS describes restoration activities such as mechanical thinning and prescribed fire as activities that would potentially reduce smoke by 45% for Alternative B; however, the document does not present the same estimates of smoke reduction for the other alternatives analyzed. The Smoke Air Quality Report estimates annualized emissions based on a 10 year projection and that report also states that Alternative D would have the highest decreased future CO2 emissions.

We recommend the Forest Service perform a comparative analysis of all analyzed alternatives that identifies percentages of smoke reduction and estimates of future decreases in CO2 emissions over the life of the project. Include the results of the comparative analysis, and any additional mitigation commitments resulting from that comparison, in the FEIS and ROD.

While the DEIS presents measures available to minimize the health impacts of prescribed burning (smoke prediction modeling, smoke monitoring, close coordination with local air districts and favorable atmospheric conditions for smoke dispersion (p. 119)), fewer opportunities are available to reduce emissions and associated effects from future intensive wildfires.

Recommendation:

We recommend the FEIS include an updated discussion of potential health effects of air emissions associated with all alternatives analyzed, including near-term health impacts of prescribed burns, as well as possible effects due to wildfire. Include a comparison of the likelihood that a catastrophic wildfire could adversely impact the health of communities and the potential populations affected, for all alternatives analyzed over the next 20 years.

Tribal Consultation

The project area is culturally and spiritually important to Tribes and Tribal Consultation is an important component of the decision-making process associated with the project. We encourage the Forest Service to continue meaningful consultation throughout the NEPA process, with all potentially affected tribal governments.

Recommendation:

We recommend that the results of consultations with tribal governments and with the Tribal Historic Preservation Office/State Historic Preservation Office, including additional commitments that are included as a part of the Preferred Alternative, be included in the FEIS.

Thank you for the opportunity to review this DEIS. We appreciate the meetings, phone calls and our cooperating agency status for the project. When the FEIS is released, please send one hard copy and one CD to the address above (mail code: ENF-4-2). If you have any questions, please contact me at (415) 947-4161, or have your staff contact James Munson, the lead reviewer for this project. James can be reached at (415) 972-3852 or Munson.James@epa.gov.

Sincerely,

Connell Dunning

Connell Dunning, Acting Manager
Environmental Review Section

Cc: Kevin Elliott, Sequoia National Forest Supervisor
Ed Armenta, Inyo National Forest Supervisor
Dean Gould, Sierra National Forest Supervisor

Enclosure: Summary of the EPA Rating Definition

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment